



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> C07H 21/04, C12N 15/63, 15/85, 15/09, C07K 5/00, 14/00, C12P 21/00		<b>A1</b>	<b>(11) International Publication Number:</b> WO 00/55174 <b>(43) International Publication Date:</b> 21 September 2000 (21.09.00)
<b>(21) International Application Number:</b> PCT/US00/05988 <b>(22) International Filing Date:</b> 8 March 2000 (08.03.00) <b>(30) Priority Data:</b> 60/124,270 12 March 1999 (12.03.99) US <b>(71) Applicant (for all designated States except US):</b> HUMAN GENOME SCIENCES, INC. [US/US]; 9410 Key West Avenue, Rockville, MD 20850 (US). <b>(71)(72) Applicant and Inventor:</b> ROSEN, Craig, A. [US/US]; 22400 Rolling Hill Road, Laytonsville, MD 20882 (US). <b>(72) Inventor; and</b> <b>(75) Inventor/Applicant (for US only):</b> RUBEN, Steven, M. [US/US]; 18528 Heritage Hills Drive, Laytonsville, MD 20882 (US). <b>(74) Agents:</b> WALES, Michele, M. et al.; Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD 20850 (US).			<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> HUMAN PROSTATE CANCER ASSOCIATED GENE SEQUENCES AND POLYPEPTIDES			
<b>(57) Abstract</b> <p>This invention relates to newly identified prostate or prostate cancer related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "prostate cancer antigens", and to the complete gene sequences associated therewith and to the expression products thereof, as well as the use of such prostate cancer antigens for detection, prevention and treatment of disorders of the prostate, particularly the presence of prostate cancer. This invention relates to the prostate cancer antigens as well as vectors, host cells, antibodies directed to prostate cancer antigens and recombinant and synthetic methods for producing the same. Also provided are diagnostic methods for diagnosing and treating, preventing and/or prognosing disorders related to the prostate, including prostate cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of prostate cancer antigens of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and/or function of the polypeptides of the present invention.</p>			

Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys Arg Ser Thr  
100 105 110

Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu Leu Pro Gly  
115 120 125

Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala Val Thr Lys  
130 135 140

Tyr Thr Ser Ser Lys  
145

<210> 1485

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1485

Asp Pro Arg Val Arg Thr Phe Pro Pro Thr Leu Leu Leu Leu Leu His  
1 5 10 15

Ser Arg Leu Ser Leu Cys Leu Ser His Phe Leu Pro Ser Pro His Pro  
20 25 30

Pro Gln Cys Thr Glu Glu Gly Asn Arg Val Gln Thr His Ala Ala Pro  
35 40 45

Val Leu Arg Arg Glu Gly Lys Pro Arg Arg Glu Ala Ala Met Asn Val  
50 55 60

Asp His Glu Val Asn Leu Leu Val Glu Glu Ile His Arg Leu Gly Ser  
65 70 75 80

Lys Asn Ala Asp Gly Lys Leu Ser Val Lys Phe Gly Val Leu Phe Arg  
85 90 95

Asp Asp Lys Cys Ala Asn Leu Phe Glu Ala Leu Val Gly Thr Leu Lys  
100 105 110

Ala Ala Lys Arg Arg Lys Ile Val Thr Tyr Pro Gly Glu Leu Leu Leu  
115 120 125

Gln Gly Val His Asp Asp Val Asp Ile Ile Leu Leu Gln Asp  
130 135 140

<210> 1486